

Notice of Allowability

Application No.

10/733,645

Examiner

Guy J. Lamarre

Applicant(s)

LIMBERG, ALLEN LEROY

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/05/04.
2. ☒ The allowed claim(s) is/are 1-71.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 8/05/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____



Guy J. Lamarre, P.E.
Primary Examiner

Examiner's Amendment & Reasons For Allowance

- * The Examiner has considered the Applicant's IDS of 8/05/04.
- * Pursuant to 35 USC 131, **Claims 1-71** are presented for examination.

Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The following has been amended:

- 1) Claim 71 last line, after "*scanned during*" added
odd-numbered cycles of read-then-overwrite operation for reading to the one of said plurality of decoders for transverse Reed-Solomon forward-error-correction coding selected to be used in said second transverse Reed-Solomon forward-error-correction decoding operations and for then being overwritten by corrected transverse Reed-Solomon forward-error-correction coding from said decoder selected to be used in said second transverse Reed-Solomon forward-error-correction decoding operations.

Reasons For Allowance

2. **Claims 1-71** are allowable over the prior art.
- 2.1 The following is an Examiner's statement of reasons for the indication of allowable subject matter: the prior art is exemplified by **Limberg et al.** (US Patent Nos. 6426780; 6496230) and **Wan et al.** (US Patent No. 6430159).

For example, **Limberg et al.** (US Patent No. 6426780) discloses data processing with error correction capability comprising data coding procedure wherein: ' *symbol decoder 16 supplies symbol decoding results in 3-parallel-bit groups, assembled by a data assembler 17 for application to trellis decoder circuitry 18. Trellis decoder circuitry 18 conventionally uses twelve*

trellis decoders. The trellis decoding results are supplied from the trellis decoder circuitry 18 to byte de-interleaver circuitry 19. Byte de-interleaver circuitry 19 parses the trellis decoding results into bytes and performs diagonal byte interleaving over a prescribed portion of the data field to recover bytes of Reed-Solomon error-correction coding for application to Reed-Solomon decoder circuitry 20. Reed-Solomon decoding by the circuitry 20 generates an error-corrected byte stream supplied to a data de-randomizer 21. The data de-randomizer 21 supplies reproduced data to the remainder of the receiver (not shown). The remainder of a complete DTV receiver will include a packet sorter, an audio decoder, an MPEG-2 decoder and so forth. The remainder of a DTV signal receiver incorporated in a digital tape recorder/reproducer will include circuitry for converting the data to a form for recording.'

However, these references do not teach or suggest the combination of claim elements described in **Claims 1-71**.

2.2 Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

* Any response to this action should be mailed to:

Commissioner of Patents and Trademarks, Washington, D.C. 20231

or faxed to: (571) 273-8300 for all formal communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guy J. Lamarre, P.E., whose telephone number is (571) 272-3826. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert De Cady, can be reached at (571) 272-3819.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3609.

Information regarding the status of an application may also be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Guy J. Lamarre, P.E
Primary Examiner
5/29/2006
